Instructions

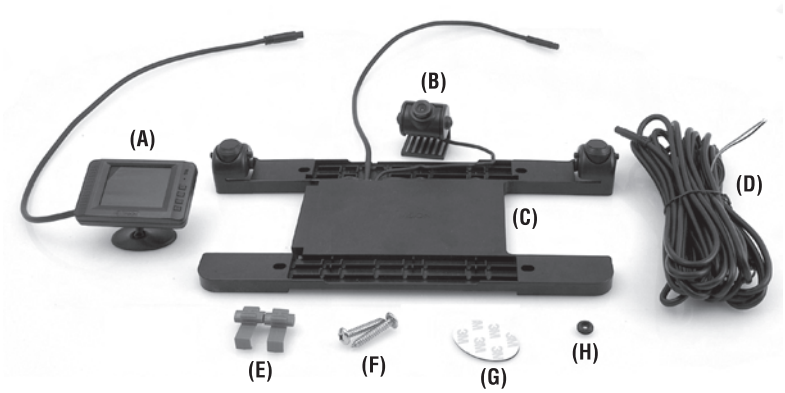
Camera System with SmartZone™ Sensing

Thank you for purchasing the nVISION™ Rear View Camera System with SmartZone™ sensing to reduce blind spots and increase visibility.

This product is designed to give you years of reliable performance. If you have any questions about this product, feel free to contact our **customer service department at (800) 835-0129, available 8 a.m. to 5 p.m. CST, Monday through Friday.**

Please do NOT contact the retail establishment where you purchased your system.

PARTS:
(A) Color Monitor
(B) Camera
(C) Mounting Bracket With Sensors
(D) Installation Cables
(E) 2 Wire Splices
(F) 2 License Plate Screws
(G) 3M Adhesive
(H) Rubber Grommet



TOOLS NEEDED:
- Wire Strippers
- Screwdriver
- Electrical Tape
- Drill (If Necessary)
- 11/32" Drill Bit

Do It Yourself Installation

Please use these instructions as general guidelines for installation. Remember every vehicle is different. So select the best installation process for your particular vehicle.

STEP 1. Select monitor location, plan out the cable route, install the cables

Place monitor **(A)** in desired location (dash or windshield) **(Fig. 1)** but do not permanently mount until later. **WARNING**: DO NOT PLACE MONITOR WHERE AIR BAGS ARE LOCATED ON YOUR VEHICLE. Before selecting a location for the monitor please check to be sure the monitor does not obstruct your view while driving.

FIGURE 1

Possible monitor mounting positions
(monitor appears larger for illustration purposes)

Plan out a route for the installation cable **(Fig. 2) (D)** to go to the back of the vehicle. Depending on the type of vehicle, it may be easier to run the cable on the inside of the vehicle above the window, tucked inside the trim or below the doors. Keep in mind that this direct wiring between the camera and monitor eliminates electrical interference and ensures the highest quality image reproduction possible. Choose the route that will work best for your particular situation. **Do not cut coaxial cable, if cut, warranty is void. Additional wire length is available if needed. Call (800) 835-0129.** Connect installation cable **(D)** to monitor **(A)** and continue routing the wire to the back of vehicle stopping at the tail light assembly area.
Helpful Hint: Refer to your vehicle owner's manual to identify the correct wire color and location.

Locate the reverse light wire and splice **(E)** the red wire to the reverse light wire. Then locate the common/ground wire behind the tail light assembly and splice **(E)** black wire to ground wire. Reassemble tail light assembly and secure wires out of the way.
Connecting Wire Splices: Reverse light wire goes through open side of wire splice. Red wire from main unit should slide through the dead-end side of wire splice. Then clamp metal piece down to connect wires and pierce insulation. Repeat for ground and black wire. **TIP:** Try doubling wire thickness to create better contact.

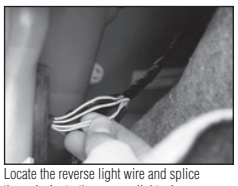
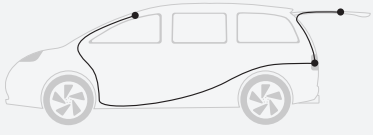
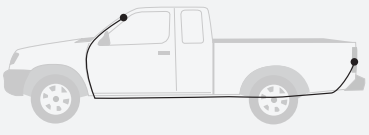

Locate the reverse light wire and splice the red wire to the reverse light wire

FIGURE 2

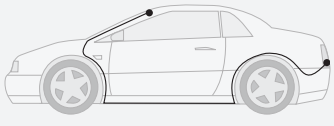
Installation for Vehicles with License Plate on Lift Gate
1. Route cable from main unit through lift gate and gate hinge. Continue routing wire to driver's side reverse light assembly.
2. Once connected to the reverse light, continue to route cable along floor board or across roof line to complete installation.



Installation for Trucks
1. Route cable from main unit to the underneath side of the truck. Run cable along frame and connect to frame with cable ties. Continue routing cable into driver compartment where front door hinges from the main body of the truck. Connect cable to monitor.



Installation for Cars
1. Route cable from main unit to driver side reverse light assembly.
2. Once connected to reverse light, continue to route cable along floor board or across roof line to complete installation.



STEP 2. Install the license plate bracket and the camera

Remove license plate from the back of your vehicle. Place the main bracket **(C)** behind the license plate and make sure license plate fits behind the sensors. Some vehicles may have a hole available to pass the wire through where the license plate is mounted or you can drill an 11/32" hole close to where the power cable is attached to the main bracket **(C)**. If you are going to drill a hole, remember to check the area to ensure nothing important will be damaged while drilling.

Next place the camera **(B)** in your desired location on the main bracket **(C)**, feed the wire through the hole that was previously drilled. Insert grommet **(H)** into the hole to protect the wire.

Install the main bracket **(C)** with license plate to the back of your vehicle using license plate screws **(F)** included in the package. **Check with local and state laws before installing system on license plate.** Some states do not allow the lettering or certification on the license plate to be covered. Our product has an adjustable camera and does not cover important information on the license plate. However, it is good to check the laws and regulations in your area before installing on your vehicle.
These screws are longer than standard license plate screws to help provide support and better attach the system to the vehicle. **PLEASE NOTE**: Screws should work on most vehicles. If they do not work on your particular vehicle please visit local hardware store to get appropriate screws.

Secure license plate bracket with provided screws

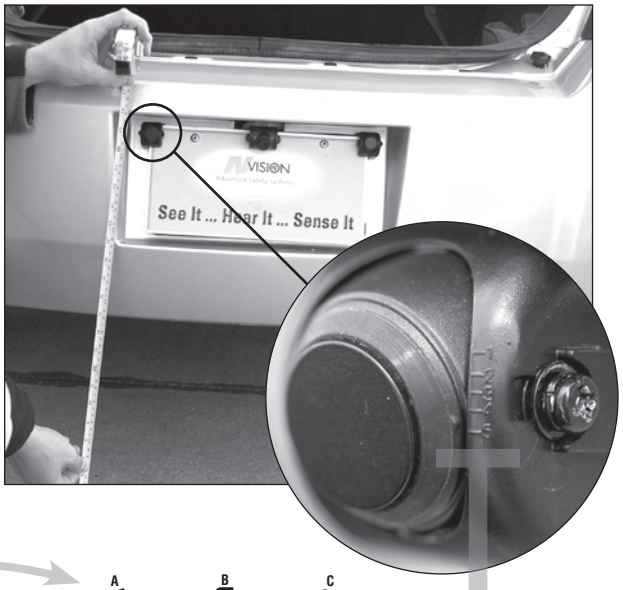
STEP 3. Connect the cables and secure the monitor

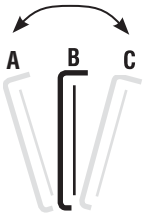
Connect wire from main bracket **(C)** to the wire coming from the monitor **(A)**. This will provide power to the camera and sensors. Hide wire where convenient depending on vehicle type. Remove protective covers from each side of the 3M adhesive **(G)**, place on bottom of monitor base. Then place monitor in desired location by pressing down firmly to ensure the monitor **(A)** is secure.

Connect wire from main bracket to the wire coming from the monitor

Positioning The Adjustable Sensors & Camera

- **Measure from ground to the center line of the sensor**
  For an accurate measurement ensure your vehicle is on a level surface.
- **Identify the angle of your license plate**
  Stand to the side of your vehicle and see if the top of your license plate is angled (Backward, Flat, Forward).
- **To determine sensor setting use your sensor height from the ground and angle of the license plate**
  Look at chart below and adjust the sensor setting according to the chart. Swivel sensor to point arrow to appropriate setting and tighten screws for each sensor. Default setting for sensors is setting 3.
- **For camera, adjust the angle up/down** to create maximum visibility behind your vehicle.
- **Ensure the sensors and camera are working correctly**
  Slowly back toward a stationary object to ensure sensors and camera are performing properly.





License plate angles

Height	A	B	C
17.7 – 23.6 in (45–60 cm)	2	1	1
23.6 – 29.5 in (60–75 cm)	3	2	1
29.5 – 37.4 in (75–95 cm)	4	3	3
> 37.4 in (95 cm)	5	4	4

How The Monitor Works

[+] [−] Buttons
The volume can be turned up through this button without entering MENU.
Volume adjustments can be made by pressing "+/-" buttons.

MENU [M] Button
Function Options: Brightness, Contrast, Volume, and Reset.
If the button is pressed once, it will switch to another option.
Adjustments can be made by pressing the button "+" and "-".
To Reset: Go to Reset screen. Push either "+/-" button once. This should reset all settings back to default. Bottom-left on screen should read "OK" to let you know the system is reset.

POWER Button
LED light will illuminate when the system is powered on, and reverse is engaged.
If the button is pressed once, the monitor and LED will be off, even though reverse is engaged.
If the button is pressed again, the system and LED light will be activated. The display will illuminate upon shifting vehicle into reverse.

PLEASE NOTE: The last adjustment setting will be memorized and become the default value.

WARRANTY INFORMATION

ONE YEAR LIMITED WARRANTY: Subject to the limitations and exclusions set forth in the Limited Warranty, nVISION Rear View Camera System is warranted by Hopkins Manufacturing Corporation against defects in material or workmanship that result in a product failure during the one year period following the date of purchase. This Limited Warranty applies only to claims made by the original end user (hereinafter "you") and cannot be assigned, transferred or conveyed to any subsequent users.

EXCLUSIONS FROM COVERAGE: This warranty does not apply to any claims arising from misuse, abuse, unauthorized repair or alteration, circumstances where nVISION Rear View Camera System is improperly installed or improperly wired contrary to nVISION Rear View Camera System instructions; or damage or defect attributable to fire or other casualty, including, without limitations, acts of God or exposure to abrasive or corrosive materials or pollutants, or attributable to collision or other accidents involving vehicles upon which the nVISION Rear View Camera System is installed.

LIMITATIONS: Hopkins Manufacturing Corporation expressly limits the applicability of the implied warranty of merchantability and the implied warranty of fitness for a particular purpose to the one-year warranty as provided herein. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply.

To the extent permitted by state law, the remedy of repair or replacement discussed below is the sole remedy available to the end user under this Limited Warranty. THIS LIMITED WARRANTY SPECIFICALLY EXCLUDES ALL INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. To the extent permitted by state law, Hopkins Manufacturing Corporation liability for nVISION Rear View Camera System will not exceed the purchase price paid for the product.

NOTICE: This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

IMPORTANT NOTE: Please check with you local and state laws to ensure by covering up part of the license plate is not a violation to the law. Hopkins Manufacturing takes not responsibility for paying any type of fine or ticket associated with this product.

EXCLUSIVE AGREEMENT: To the extent permitted by state law, this one-year limited warranty is a complete and exclusive statement of the warranties, which apply to the nVISION Rear View Camera System; there are no express or implied warranties beyond those expressly stated above. No employee, agent, dealer or other person is authorized to give any warranties on behalf of Hopkins Manufacturing Corporation, except as authorized in writing.

STATUE OF LIMITATIONS: To the extent permitted by state law, in purchasing the nVISION Rear View Camera System you agree that any action for breach of contract or warranty must be commenced within one year after the cause of action has occurred.

PROCEDURE: In the event that a product failure covered by this warranty occurs while this warranty is still valid, Hopkins Manufacturing Corporation will, at its option, either: (a) repair the defective unit; (b) replace the defective unit with a new unit; or (c) replace the defective unit with a refurbished unit. Hopkins Manufacturing Corporation will ship your repaired, new, or refurbished unit to you without charge for parts, service, or any other cost (except shipping and handling) incurred by Hopkins Manufacturing Corporation or its representatives in connection with the performance of the warranty. Failed units covered under this warranty must be sent by you to Hopkins Manufacturing Corporation with shipping prepaid by you. You are responsible for all cost incurred in the removal, reinstallation, and shipping of the unit. A copy of the sales slip received by you at the point of purchase of the unit must accompany the returned unit. Call Hopkins Manufacturing Corporation for Warranty Return Authorization.

For Warranty return Authorization
Call: Hopkins Manufacturing Corporation
Toll Free: (800) 835-0129